

# Shinsa

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## Problem Statement

Critical thinking and planning are aspects that are challenged when it comes to games like Chess. However, there is almost a saturation to the extent to which variations and permutations of moves are possible thus leading to a need for a game that takes these attributes and competitiveness to the next level. We will provide a more complex yet structured web based game that will adhere to the foibles of current board games and promote a competitive environment.

## Project Objectives

- Address the improvements that can be made to current board games
- Research on aspects that current chess masterminds want to be implemented
- Develop a game requiring high strategic skills based on the studies
- Allow users globally to compete against each other in a live competitive environment.
- Develop a live matching algorithm that would consider players waiting to be queued to an opponent and pair them based on MMR (match making rating).

## Stakeholders

- Users: Any person throughout the world without a restriction on age.
- Developers: Sahil Pujari, Wei Zhang, Graham Otte, Folasade Ajayi, Keenan Wresch
- Project Manager: Sahil Pujari.
- Project Owner: Tim Poston, Renowned Mathematician and Chief Scientist at Forus Health.

## Project Deliverables

- A web based game that allows users to play a game session against each other.
- Backend Node.JS based server that runs the match making algorithm and forms pairs of 2 among the users currently in a wait list. Further, it enables hosting the live game session.
- A SQL database that tracks user data and game session data.
- Pixi.JS / Unity for frontend graphics and internal rendering.